

High-speed Dispenser

YRM-D



High-speed, High-accuracy, and Stable Dispensing

High-speed Dispenser for High-density & High-precision Mounting

High-speed Dispenser

YRM-D

High speed & precision dispensing

Top-class speed and accuracy in the industry maximize both production quantities and product quality.

Versatility

A wide range of functions that meet customers' needs enable the machine to flexibly be deployed to various production sites.

Labor savings

Automating and supporting routine work reduces workloads and human error.



Watch a video on the official site ▶



Feature

1

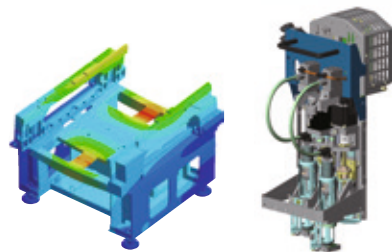
High-speed, High-precision Dispensing

Achieving high-level speed, accuracy, and stability realizes high productivity

High speed

Dispensing cycle time
0.07s/shot

High accuracy

Dispensing accuracy
 $\pm 0.05\text{mm}$, $Cpk \geq 1.0$


The sturdy framework designed for surface mounters reduces vibration during production.

Stable dispensing

A heater unit provides high-precision temperature control to maintain constant dispensing fluid conditions, which achieves stable fluid supply.

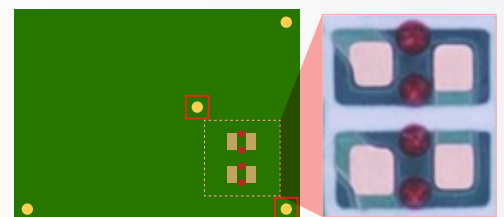


The universal-type high-precision dispense head allows for independent Z- and R-axis servo control, while supporting various types of fluids.



Accurate dispensing on various types of PCBs

When using multiple production PCBs with transfer pallets, large PCBs prone to generating expansion/contraction and distortion, or paper phenol PCBs, this machine detects multiple marks and locally corrects positions to perform high-precision dispensing.

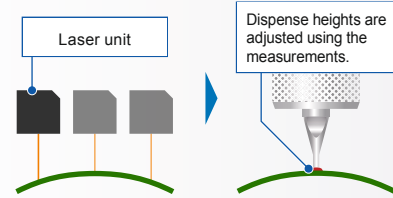
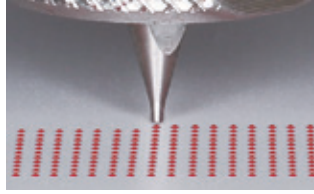

Fiducial correction over the entire PCB
 Position accuracy is low when dispensing on PCBs having poor accuracy, such as large PCBs and paper phenol PCBs.

Fiducial correction using local marks
 Setting individual local marks enables high-accuracy dispensing even on PCBs having poor accuracy.

Feature

2 Versatility

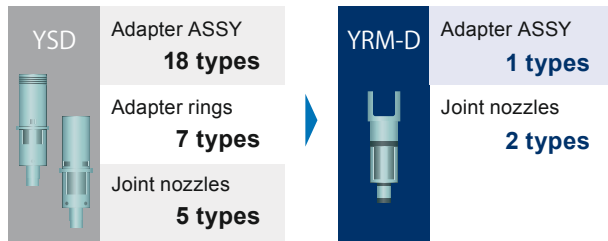
Flexibly dispensing on various types of PCBs

To apply fluids on high-density PCBs that inhibit contact coating, depressions on PCBs, and component mounting PCBs, non-contact dispensing is available. The PCB surface is measured with a laser beam to obtain heights and warps of unevenness, which are reflected in dispense heights to prevent the generation of defects.



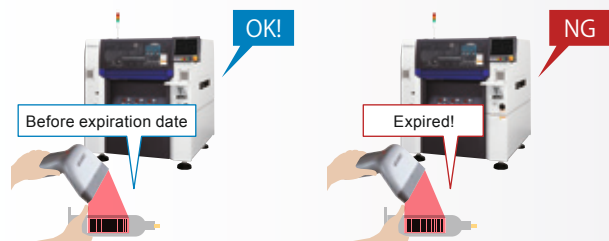
Using common components to improve workability

Compatible with various syringes from 5 to 30 cc. Workload and storage complexity are minimized through the use of common attachments for each manufacturer and each volume.



Accurate and reliable control of usage expiration dates

Records storage and retrieval of dispense fluids to accurately control usage expiration dates. Issues cautions to operators during setup and production regarding expiration dates to reliably prevent the use of old fluids.

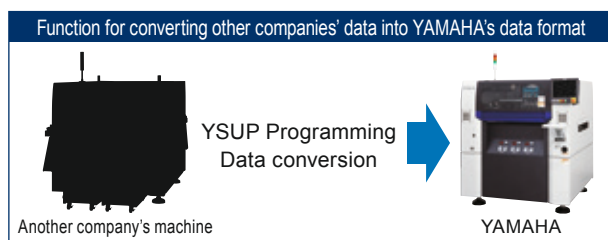


Feature

3 Labor Savings

Automatic and easy data generation

Automatically converts CAD data into dispense data. Simplified data generation work reduces the time needed for production preparation.



Automatic correction improves stability

Recognizes the dispensing diameter by pre-dispense to automatically control the dispensing amounts. Minimization of work stabilizes the dispensing accuracy.



Timely and efficient supply

Uses a sensor to detect the remaining amount of dispense fluid in the syringe in order to dispatch an empty alert. Supports replenishment at the appropriate time.



Excellent cleanability shortens cleaning times

The nozzle is directly mounted on the syringe. This makes maintenance tasks such as cleaning easy.



1 STOP SMART SOLUTION

High-efficiency, defect-free production, made possible as Yamaha is a manufacturer of inspection system, solder-paste printer and surface mounter.

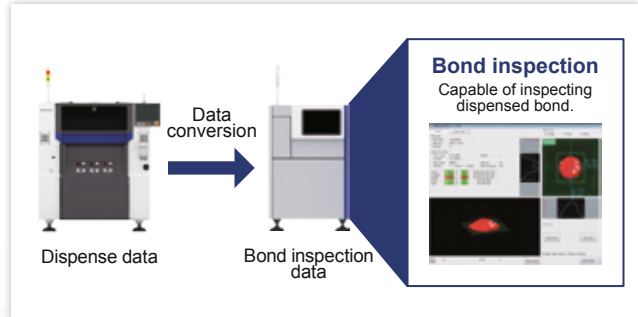
Improves operational efficiency by visualizing the production line

Helps to identify and locate problem sources by visualizing the entire production line in real time. Early detection of problems in the line and on the floor minimizes their impacts on product quality and production progress.



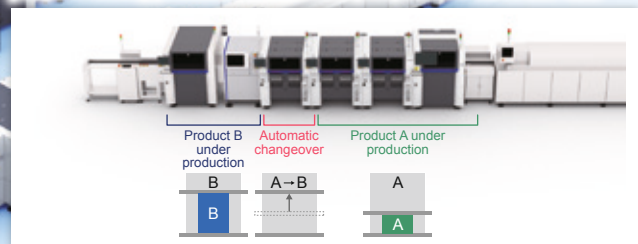
Reduces workloads by automatic data conversion

Automatically converts dispense data into bond inspection data via SPI, which reduces operators' workloads.



Seamless automatic switching of production types for efficient multi-production.

Automatic change-over function automatically switches production program during production, to be ready to produce the next PCB.



Click here to find out more ▶



SEMI SMT-ELS Capable

Compatible with SEMI SMT-ELS Communication Standards (option). Achieves seamless connection for, for example, Auto Program Change-Over, with other companies' machines.

Specifications

Note : Specifications and appearance are subject to change without prior notice.

Model	YRM-D
Dispensing method	Air-pulsed type
Dispensing capability	0.07s/shot ^{Note 1}
Dispensing accuracy	±0.05mm Cpk≥1.0
Applicable PCB	L50 x W50mm to L510 x W460mm
Power supply	3-Phase AC 200/208/220/240/380/400/416V ±10% 50/60Hz
Air supply source	Over 0.45 MPa, clean and dry state
External dimension	L1,254 x W1,440 x H1,445mm
Weight	Approx. 1,200kg
Laser Class	Class 1 Laser Product (IEC60825-1,FDA (CDRH) Part 1040.10)

Note 1 : Under our optimized conditions

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The models shown in the photographs in this catalog may differ slightly from the standard specifications. Specifications and appearance are subject to change without prior notice.

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